TurboStack™

AT-TSA*x*
Appliqués

AT-TSA1
AT-TSA2
AT-TSA3
AT-TSA5
AT-TSA8
AT-TSA9

User Manual

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Electrical Safety and Installation Requirements

RADIATED ENERGY

U.S. Federal Communications
Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and , if not installed and used in accordance with this instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Note: Modifications or changes not expressly approved of by the manufacturer or the FCC, can void your right to operate this equipment.

Canadian Department of Communications
This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

STANDARDS: This product meets the following standards

RFI EmissionEN55022 Class A

WARNING: In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Immunity EN50082-1

Electrical Safety EN60950, UL1950, CSA 950

SAFETY

LIGHTNING DANGER
DANGER: DO NOT WORK on equipment or CABLES during periods of LIGHTNING ACTIVITY.

This is a “CLASS 1 LED PRODUCT”

OPERATING TEMPERATURE: This product is designed for a maximum ambient temperature of 40 degrees C.

ENVIRONMENTAL AIR NOTICE
Caution: UL listed for use in other Environmental Air Spaces in Accordance with Article 300-22(C) of the U.S.A National Electrical Code.

Note: Product is not Plenum rated

ALL COUNTRIES: Install product in accordance with local and National Electrical Codes.

NORMEN: Dieses Produkt erfüllt die Anforderungen der nachfolgenden Normen.

Hochfrequenzstörung EN55022 Klasse A

WARNUNG: Bei Verwendung zu Hause kann dieses Produkt Funkstörungen hervorrufen. In diesem Fall müßte der Anwender angemessene Gegenmaßnahmen ergreifen.

Störsicherheit EN50082-1

Elektrische Sicherheit EN60950, UL1950, CSA 950

SICHERHEIT

GEFAHR DURCH BLITZSCHLAG
GEFAHR: Keine Arbeiten am Gerät oder an den Kabeln während eines Gewitters ausführen

Das ist ein “LED Produkt der Klasse 1”

BETRIEBSTEMPERATUR
Dieses Produkt wurde für den Betrieb in einer Umgebungstemperatur von nicht mehr als 40° C entworfen.

ALLE LÄNDER: Installation muß örtlichen und nationalen elektrischen Vorschriften entsprechen.

Radiofrekvens forstyrrelsesemission EN55022 Klasse A

ADVARSEL: I et hjemligt miljø kunne dette produkt forårsage radio forstyrrelse. Bliver det tilfældet, påkræves brugeren muligvis at tage tilstrækkelige foranstaltninger.

Immunitet EN50082-1

Elektrisk sikkerhed. EN60950, UL1950, CSA 950.

SIKKERHED

FARE UNDER UVEJR
FARE: UNDLAD at arbejde på udstyr eller KABLER i perioder med LYNAKTIVITET.

Dette er et “PRODUKT UNDER KLASSE 1 LED”

BETJENINGSTEMPERATUR
Dette apparat er konstrueret til en omgivende temperatur på maksimum 40 grader C.

ALLE LANDE: Installation af produktet skal ske i overensstemmelse med lokal og national lovgivning for elektriske installationer.

RFI Emissie EN55022 Klasse A

WAARSCHUWING: Binnenshuis kan dit product radiostoring veroorzaken, in welk geval de gebruiker verplicht kan worden om gepaste maatregelen te nemen.

Immuniteit EN50082-1

Electrische Veiligheid EN60950, UL1950, CSA 950

VEILIGHEID

GEVAAR VOOR BLIKSEMINSLAG
GEVAAR: NIET aan toestellen of KABELS WERKEN bij BLIKSEM.

Dit is een “KLASSE 1 LED-PRODUKT”

BEDRIJFSTEMPERATUUR
De omgevingstemperatuur voor dit produkt mag niet meer bedragen dan 40 graden Celsius.

ALLE LANDEN: het toestel installeren overeenkomstig de lokale en nationale elektrische voorschriften.

NORMES: ce produit est conforme aux normes de suivantes :

Emission d'interférences radioélectriques EN55022 Classe A

MISE EN GARDE : dans un environnement domestique, ce produit peut provoquer des interférences radioélectriques. Auquel cas, l'utilisateur devra prendre les mesures adéquates.

Immunité EN50082 - 1

Sécurité électrique EN60950, UL1950, CSA 950

SÉCURITÉ

DANGER DE FOUDRE
DANGER: NE PAS MANIER le matériel ou les CÂBLES lors d'activité orageuse.

Ce matériel est un "PRODUIT À DIODE ÉLECTROLUMINESCENTE DE CLASSE 1"

TEMPÉRATURE DE FONCTIONNEMENT
Ce matériel est capable de tolérer une température ambiante maximum de 40 degrés Celsius.

POUR TOUS PAYS: Installer le matériel conformément aux normes électriques nationales et locales.

Radioaaltojen häirintä EN55022 Luokka A

VAROITUS: Kotiolosuhteissa tämä laite voi aiheuttaa radioaaltojen häiröitä, missä tapauksessa laitteen käyttäjän on mahdollisesti ryhdyttävä tarpeellisiin toimenpiteisiin.

Kestävyys EN50082-1

Sähköturvallisuus EN60950, UL1950, CSA 950

TURVALLISUUS

ALAMANISKUVAARA
HENGENVAARA: ÄLÄ TYÖSKENTELE laitteiden tai KAAPELEIDEN KANSSA SALAMOINNIN AIKANA.

Tämä on "ENSIMMÄISEN LUOKAN VALODIODITUOTE"

KÄYTTÖLÄMPÖTILA
Tämä tuote on suunniteltu ympäröivän ilman maksimilämpötilalle 40 °C.

KAIKKI MAAT: Asenna tuote paikallisten ja kansallisten sähköturvallisuusmääräysten mukaisesti.

Emissione RFI (interferenza di radiofrequenza) EN55022 Classe A

AVVERTENZA: in ambiente domestico questo prodotto potrebbe causare radio interferenza. In questo caso potrebbe richiedersi all'utente di prendere gli adeguati provvedimenti.

Immunità EN50082-1

Sicurezza elettrica EN60950, UL1950, CSA 950

NORME DI SICUREZZA

PERICOLO DI FULMINI
PERICOLO: NON LAVORARE sul dispositivo o sui CAVI durante PRECIPITAZIONI TEMPORALESCHE.

Questo è un "PRODOTTO CON LED DI CLASSE 1"

TEMPERATURA DI FUNZIONAMENTO
Questo prodotto è concepito per una temperatura ambientale massima di 40 gradi centigradi.

TUTTI I PAESI: installare il prodotto in conformità delle vigenti normative elettriche nazionali.

RFI stråling EN55022 Klasse A

ADVARSEL: Hvis dette produktet benyttes til privat bruk, kan produktet forårsake radioforstyrrelse. Hvis dette skjer, må brukeren ta de nødvendige forholdsregler.

Immunitet EN50082-1

Elektrisk sikkerhet EN60950, UL1950, CSA 950

SIKKERHET

FARE FOR LYNNEDSLAG
FARE: ARBEID IKKE på utstyr eller KABLER i TORDENVÆR.

Dette er et "KLASSE 1 LED PRODUKT"

DRIFTSTEMPERATUR
Dette produktet er konstruert for bruk i maksimum romtemperatur på 40 grader celsius.

ALLE LAND: Produktet må installeres i samsvar med de lokale og nasjonale elektriske koder.

Emissão de interferência de radiofrequência EN55022 Classe A

AVISO: Num ambiente doméstico este produto pode causar interferência na radiorrecepção e, neste caso, pode ser necessário que o utente tome as medidas adequadas.

Imunidade EN50082-1

Segurança Eléctrica EN60950, UL1950, CSA 950

SEGURANÇA

PERIGO DE CHOQUE CAUSADO POR RAIO
PERIGO: NÃO TRABALHE no equipamento ou nos CABOS durante períodos suscetíveis a QUEDAS DE RAIO.

Este é um "PRODUTO CLASSE 1 LED"

TEMPERATURA DE FUNCIONAMENTO
Este produto foi projetado para uma temperatura ambiente máxima de 40 graus centígrados.

TODOS OS PAÍSES: Instale o produto de acordo com as normas nacionais e locais para instalações elétricas.

Emisión RFI EN55022 Clase A

ADVERTENCIA: en un entorno doméstico, este producto puede causar radiointerferencias, en cuyo caso, puede requerirse del usuario que tome las medidas que sean convenientes al respecto.

Inmunidad EN50082-1

Seguridad eléctrica EN60950, UL1950, CSA 950

SEGURIDAD

PELIGRO DE RAYOS
PELIGRO: NO REALICE NINGUN TIPO DE TRABAJO O CONEXION en los equipos o en LOS CABLES durante TORMENTAS ELECTRICAS.

Este es un "PRODUCTO DE DIODO LUMINISCENTE (LED) CLASE 1"

TEMPERATURA REQUERIDA PARA LA OPERACIÓN
Este producto está diseñado para una temperatura ambiental máxima de 40 grados C.

PARA TODOS LOS PAÍSES: Monte el producto de acuerdo con los Códigos Eléctricos locales y nacionales.

Radiostörning EN55022 Klass A

VARNING: Denna produkt kan ge upphov till radiostörningar i hemmet, vilket kan tvinga användaren till att vidtaga erforderliga åtgärder.

Immunitet EN50082-1

Elsäkerhet EN60950, UL1950, CSA 950

SÄKERHET

FARA FÖR BLIXTNEDSLAG
FARA: ARBETA EJ på utrustningen eller kablarna vid ÅSKVÄDER.

Detta är en "KLASS 1 LYSDIODPRODUKT"

DRIFTSTEMPERATUR
Denna produkt är konstruerad för rumstemperatur ej överstigande 40 grader Celsius.

ALLA LÄNDER: Installera produkten i enlighet med lokala och statliga bestämmelser för elektrisk utrustning.

Table of Contents

Electrical Safety and Installation Requirements i
TurboStack™ Hub Appliqués 1
TurboStack Hub Connection Options 1
External Transceivers 1
Network Appliqués 2
Location of Appliqué Port 3
Network Appliqué Options 4
Appliqué Installation/Removal Procedures 4
Technical Support Fax Order 7
Incident Summary 7
AT-TSAx Manual Feedback 9
Where To Find Us 11

List of Figures

Figure 1: AUI Network Connector 2
Figure 2: AT-TS06/SC Faceplate 3
Figure 3: AT-TSAx Appliqués 4
Figure 4: Appliqué Replacement 5

List of Tables

Table 1: ATI Micro Transceivers 1
Table 2: Appliqué List 2

TurboStack™ Hub Appliqués

This manual describes the hub appliqué options and installation procedures for ATI's TurboStack™ hubs. For information on the software installation and network management aspects of TurboStack hubs, see the separate *TurboStack Manageable Hub Installation Manual* and *TurboStack AT-S10 Operations Manual*. These publications are shipped with each manageable hub.

TurboStack Hub Connection Options

In a TurboStack department concentrator chassis, manageable hubs can be connected to network zones using different cable media by installing different appliqués or external transceivers.

Note

This manual refers to two or more chassis-mounted hubs, at least one of which is manageable, as a department concentrator. The term hub refers to either a standalone hubs (i.e., a single manageable device) or a department concentrator configuration.

External Transceivers

The appliqué port on all TurboStack hubs with management are pre-configured with the AUI appliqué. You can configure the AUI network port to another media type by using an external transceiver. Table 1 shows the ATI micro transceivers available for this purpose.

Table 1: ATI Micro Transceivers

Model	Description
AT-MX40F/ST	Fiber Optic (10BASE-FL), ST Connector
AT-MX50F/SM	Fiber Optic (10BASE-FL), SMA Connector
AT-MX55F/SC	Fiber Optic (10BASE-FL), SC Connector
AT-210T/210TS/MX20T	UTP (10BASE-T), RJ45 Connector
AT-MX10/MX10S	Thin Ethernet (10BASE2), BNC Connector

If you use an external transceiver for a backbone connection, the transceiver should be connected to an AUI appliqué on the hub faceplate. Figure 1 shows the factory-installed AUI connector and plastic cover provided with all TurboStack hubs.

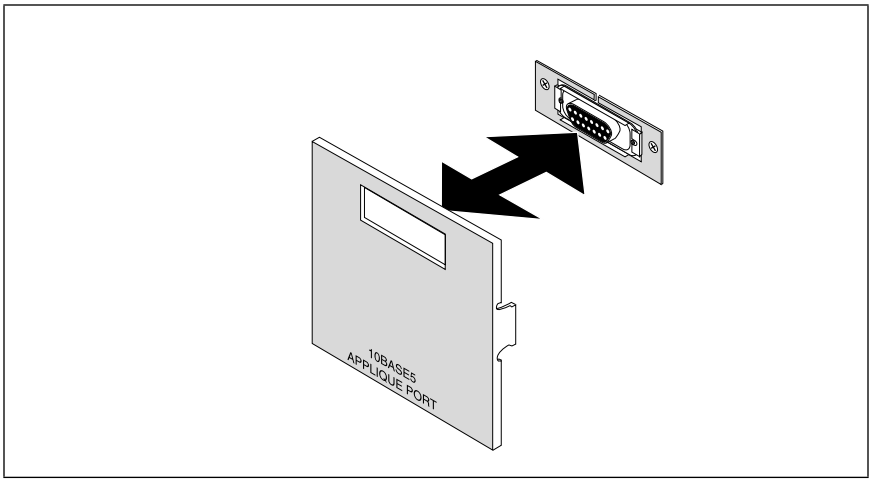

Figure 1: AUI Network Connector

Network Appliqués

If the network backbone is 10BASE2, 10BASE-T or fiber optic (10BASE-FL), an appliqué can be used instead of an external transceiver. Table 2 lists the available TurboStack appliqué options.

Table 2: Appliqué List

Model	Connector Type	Description
AT-TSA1	SMA	10BASE-FL
AT-TSA2	SC	10BASE-FL
AT-TSA3	ST	10BASE-FL
AT-TSA5	AUI	10BASE5
AT-TSA8	BNC	10BASE2
AT-TSA9	RJ45	10BASE-T

Location of Appliqué Port

In a TurboStack department concentrator chassis, manageable hubs can be connected to network zones using different cable media by installing different appliqués.

To install or remove an appliqué, find the TurboStack hub appliqué port. As shown in Figure 2, this port is located directly to the left of the RS232 terminal port on the module faceplate (in this case an AT-TS06F/SC model hub).

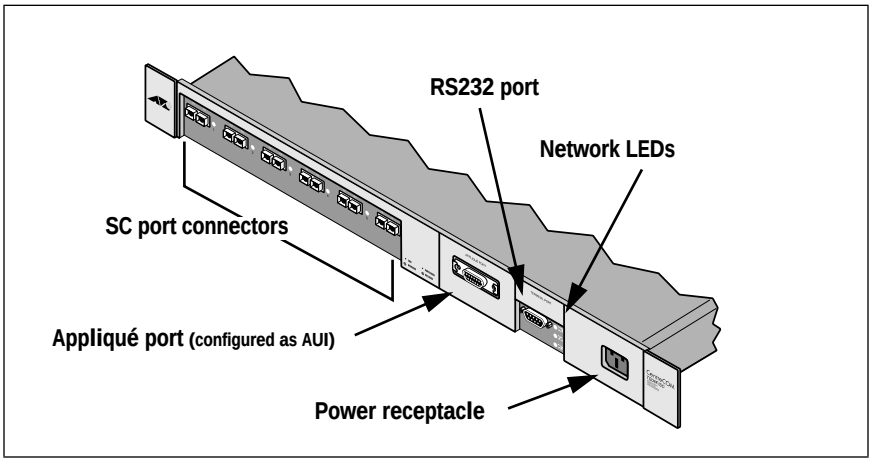

Figure 2: AT-TS06F/SC Faceplate

The appliqué port is convertible on all TurboStack hubs with management. You may configure it by installing an alternative to the AUI network-interface appliqué as described below.

Network Appliqué Options

Optional appliqués are available for connection with fiber optic (ST, SC, or SM), thinnet (BNC) or UTP (RJ45) cabling, in addition to the AUI interface. Figure 3 shows the different appliqué faceplates available.

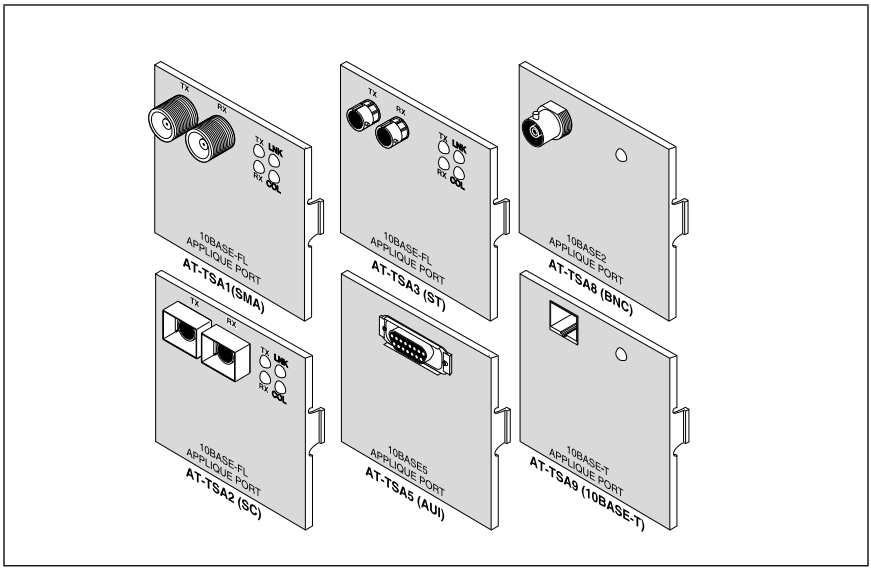

Figure 3: AT-TSAx Appliqués

Note

It is advisable to turn off the power since you will be removing screws and inserting metal parts into the appliqué slot.

Appliqué Installation/Removal Procedures

Appliqués attach to an TurboStack hub on the front panel. Specific installation procedures are described below.

To remove an AUI appliqué

1. Snap off the plastic cover plate on the AUI connector.
2. Remove the AUI appliqué screws and pop it out, as shown in Figure 4.

Note

Do not unscrew the AUI slide kit screws that secure the AUI connector to the appliqué until the appliqué pops out. The washers and nuts on the back of the slide kit may fall iniside the hub module and will be difficult to retrieve.

3. Detach the AUI connector from the plate by removing the slide kit screws, washers, and nuts.
4. Carefully pull the AUI connector from the hub faceplate to expose the ribbon cable as shown in Figure 4.

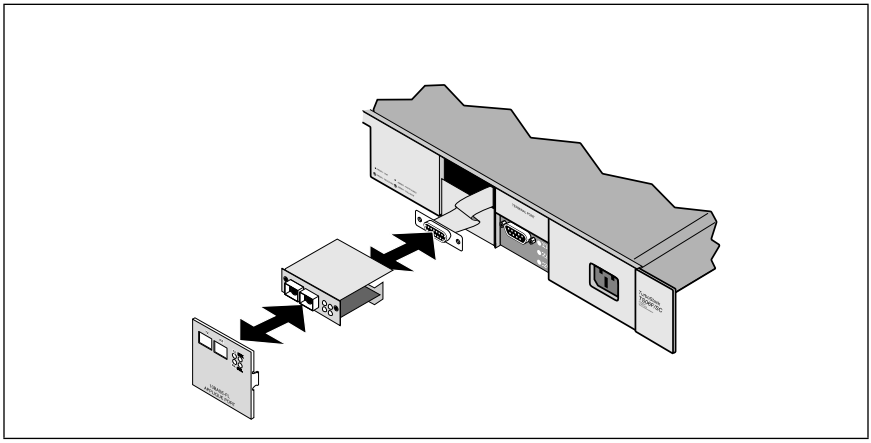

Figure 4: Appliqué Replacement

5. Remove the plate from the ribbon cable by rotating the cable 90° and sliding it through the slot in the plate.

To install a 10BASE2, 10BASE-T or fiber Optic (10BASE-FL) appliqué

1. Plug the new appliqué into the AUI connector, after the connector has been detached from the plate (Step 3 above).
2. Secure the new appliqué with the appliqué screws.
3. Slide the appliqué into the port cavity and screw it down. Do not overtighten.
4. Snap the plastic cover plate back in place on the hub faceplate.

To remove a 10BASE2, 10BASE-T or fiber Optic (10BASEFL) appliqué

1. Snap off the plastic cover plate on the installed appliqué.
2. Remove the appliqué screws and pull out the appliqué.
3. Follow the steps for appliqué removal detailed above.

To install an AUI appliqué

1. Using the supplied screws, lock washers, and nuts, attach the AUI appliqué mounting plate and locking bracket to the AUI connector.
2. Using the supplied appliqué screws (shown in Figure 1 above), attach the AUI appliqué to the hub faceplate.
3. Snap the AT-TSA5 (AUI) plastic cover plate in place on the hub faceplate.

Note

Loose metal parts can cause damage to exposed circuit boards and components. Handle parts and any required tools with care during installation.

Technical Support Fax Order

Name _____

Company _____

Address _____

City _____ **State/Province** _____

Zip/Postal Code _____ **Country** _____

Phone _____ **Fax** _____

Incident Summary

Model number of Allied Telesyn product I am using _____

Network software products I am using (e.g., network managers) _____

_____

_____

Brief summary of problem _____

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Conditions (List the steps that led up to the problem.) _____

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Detailed description (Use separate sheet, if necessary)

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When completed, fax this sheet to the appropriate ATI office. Fax numbers can be found on page 11.

AT-TSAx Manual Feedback

Please tell us what additional information you would like to see discussed in the manual. If there are topics you would like information on that were not covered in the manual, please photocopy this page, answer the questions and fax or mail this form back to Allied Telesyn International Corp. The mailing address and fax number are at the bottom of the page. Your comments are valuable when we plan future revisions of the manual.

I found the following the most valuable _____

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I would like the following more developed _____

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I would find the manual more useful if _____

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